

of the second, third, and fourth developing modules **1630C**, **1630M**, and **1630Y** are identical to that of the first developing module **1630K**.

[0412] The transfer module **1640** may transfer (or copy) a toner image onto the print medium **P** fed by the feeding module **1610**, and include the transfer belt **1641** for transferring the toner image of the photosensitive drum **1631** onto the print medium **P**.

[0413] The settlement module **1650** may settle the toner image transferred onto the print medium **P** with heat and pressure, and may include a heating roller **1651** for heating the print medium **P** with the toner image transferred thereon, and a pressing roller **1642** for pressing the print medium **P** with the toner image transferred thereon.

[0414] The image former **1600** may use the procedure of exposure-development-settlement to form an image on the print medium **P** while the print medium **P** is being fed.

[0415] The image processor **1200** may analyze or process the image acquired by the image acquirer **1100**.

[0416] For example, the image processor **1200** may analyze the image acquired by the image acquirer **1100**, and determine whether the acquired image is text or pictures. The image processor **1200** may analyze the image acquired by the image acquirer **1100**, and determine whether the acquired image is a monochrome image e.g., only in white, black, and gray, or a color image e.g., in multiple colors.

[0417] Furthermore, the image processor **1200** may increase sharpness of the image acquired by the image acquirer **1100**, or add a blurring effect onto the acquired image.

[0418] The image processor **1200** may include a graphic processor **1210** for performing operation to process the image acquired by the image acquirer **1100**, and a graphic memory **1220** for storing a program or data related to computational operation of the graphic processor **1210**.

[0419] The controller **1300** may control operation of the aforementioned image acquirer **1100**, user interface **1400**, storage **1500**, and image processor **1200**.

[0420] For example, the controller **1300** may control the image acquirer **1100** to acquire a monochrome image or color image depending on the image acquisition type, and may control the image acquirer **1100** to adjust the document feed speed or sensor moving speed depending on the image acquisition resolution.

[0421] Furthermore, the controller **1300** may control the image processor **1200** to increase sharpness of the image or add a blurring effect onto the image depending on whether the penetrated image **PI** is text or pictures.

[0422] The controller **1300** may include a control processor **1310** for performing operation to control operation of the image forming apparatus **1001**, and a control memory **1320** for storing a program and data related to computational operation of the control processor **1310**.

[0423] Another embodiment of the features of the image forming apparatus **1001** was described above.

[0424] Operation of the image acquiring apparatus **1001** according to the embodiment will now be described.

[0425] FIG. 29 is a flowchart illustrating an image forming method carried out by an image forming apparatus, according to an embodiment of the present disclosure.

[0426] An image forming method **1700** of the image acquiring apparatus **1001** is described in connection with FIG. 29.

[0427] The image forming apparatus **1001** receives an instruction from the user to acquire an image on a single side of the document **D**, in operation **1710**.

[0428] For example, the user may put the document **D** on the input tray **1001c** of the image forming apparatus **1001** with a side having an image **OI** to be acquired facing upward, and input an instruction to initiate image acquisition through the user interface **1400**.

[0429] To help understand the present disclosure, it is assumed herein that an image is formed on the first side **S1** of the document **D**.

[0430] The image forming apparatus **1001** acquires a penetrated image **PI** of the document **D**, in operation **1720**.

[0431] While the document **D** is being fed along the feed path **FP**, the second image sensor module **1120** of the image acquirer **1100** may obtain the penetrated image **PI** of the first side **S1** through the second side **S2**.

[0432] The image forming apparatus **1001** then analyzes the penetrated image **PI** of the document **D**, in operation **1730**.

[0433] The image processor **1200** of the image forming apparatus **1001** may receive image data of the penetrated image **PI** from the image acquirer **1100** and analyze the received image data of the penetrated image **PI**.

[0434] The image processor **1200** may determine whether the image of the document **D** is a text image or a picture image or whether the image of the document **D** is a monochrome image or a color image, based on analysis of the penetrated image **PI**.

[0435] The image processor **1200** may provide the result of analyzing the penetrated image **PI** to the controller **1300**.

[0436] The image forming apparatus **1001** acquires an original image **OI** of the document **D**, in operation **1740**.

[0437] The document **D** fed by the document feed device **1130** reaches the first image sensor module **1110**, which is then able to acquire the original image **OI** formed on the first side **S1** of the document **D**.

[0438] Before the first image sensor module **1110** obtains the original image **OI** of the document **D**, the controller **1300** may change settings about acquiring the original image **OI** depending on the result of analyzing the penetrated image **PI**.

[0439] For example, the controller **1300** may control the image acquirer **1100** to acquire a monochrome image or color image depending on whether the penetrated image **PI** is a monochrome image or color image, and control the image acquirer **1100** to adjust the document feed speed or sensor moving speed depending on whether the penetrated image **PI** is a text image or a picture image.

[0440] The image forming apparatus **1001** processes the original image **OI** of the document **D**, in operation **1750**.

[0441] The image processor **1200** of the image forming apparatus **1001** may process the original image **OI** received from the image acquirer **1100** in real time, to make the image viewed more clearly to the user.

[0442] In this regard, the image processor **1200** may process the original image **OI** differently depending on the result of analyzing the penetrated image **PI**.

[0443] For example, if the result of analyzing the penetrated image **PI** reveals that the original image **OI** includes characters or symbols only, the image processor **1200** may perform image processing to increase sharpness of the image, and if the result of analyzing the penetrated image **PI** reveals that the original image **OI** includes pictures only, the